



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

WQ-16J

JAN 29 2010

LSA Document #08-764 (Antidegradation)
MaryAnn Stevens
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Ave., MC65-41
Indianapolis, Indiana 46204-2251

Dear Ms. Stevens:


The U.S. Environmental Protection Agency has reviewed Indiana's draft antidegradation rules published on December 16, 2009 in the Indiana Register for second notice of public comment. My staff have participated in the Indiana stakeholder meetings throughout 2008 and 2009, submitted informal comments via email, and held conference calls with Indiana Department of Environmental Management (IDEM) staff to discuss our concerns via telephone. We are pleased to see that the following items were included in the December 16 version:

- Tier 1 antidegradation review to protect existing uses and prohibit a lowering of water quality where impairment exists.
- An attempt to address how antidegradation should be handled in general permits.
- Expanded social and economic section including more options for determining social and economic importance.
- An attempt to eliminate two separate antidegradation rules, one for the Great Lakes basin and one for other waters, and compile the requirements under one rule.

However, based on our review, we believe several components of the draft rules appear to be inconsistent with applicable Federal requirements and could result in EPA's disapproval if they are not revised or clarification is not provided to explain how the language is consistent with Federal requirements. We have also provided less significant comments on aspects of the rules, which if addressed, would improve the clarity of the rules. We look forward to working closely

with IDEM to develop rules that are workable and consistent with the Clean Water Act and Federal requirements. My staff and I will be happy to answer any questions IDEM may have about these comments. Please feel free to contact me at (312) 886-6758, or Kathleen Mayo of my staff at (312) 353-5592.

Sincerely,

A handwritten signature in cursive script that reads "Linda Holst".

Linda Holst, Chief
Water Quality Branch

Enclosure

EPA Comments for Indiana Antidegradation Rules, Second Notice

I. ELEMENTS OF INDIANA'S PROPOSED RULES THAT APPEAR TO BE INCONSTENT WITH THE APPLICABLE FEDERAL REQUIREMENTS

1. Definition of "pollutant of concern" –327 IAC 2-1.3-2, #43

"Pollutant of concern" is defined as a pollutant that is reasonably expected to be present in a new or increased discharge, and in the receiving water in sufficient amounts to have a potentially detrimental effect on the designated or existing uses of the receiving water. In previous responses to comments, IDEM indicated that it would consider a pollutant to be present in sufficient amounts to have a detrimental effect on designated uses if the pollutant were present in concentrations at or near those triggering permit limits. This is inconsistent with the Federal requirement to maintain and protect high quality waters and, given IDEM's previous statements, to be inconsistent with EPA's guidance on significance or *de minimis*.

Recommended changes to Indiana's draft rules:

The term "pollutant of concern" should be struck from the draft rules. The draft rules already include other provisions that allow for distinguishing between significant and insignificant lowering of water quality for purposes of determining the extent of review under antidegradation.

2. De minimis threshold for new or increased loadings of pollutants without numeric water quality criteria or data sufficient to calculate a numeric water quality criterion or value - 327 IAC 2-1.3-4(b)(1)(A)(i)(BB) and (CC)

While Indiana may distinguish between significant and insignificant lowering of water quality and not require antidegradation review for actions that result in an insignificant (i.e., *de minimis*) lowering of water quality, the determination of either type of threshold must be based on the extent of expected change in ambient water quality. On page 32, a *de minimis* threshold is proposed that is less than or equal to 20% of existing loading capacity for pollutants without published criteria or data sufficient to calculate a numeric criterion. IDEM justifies the *de minimis* percentage by stating that water quality values calculated using partial toxicity data may be overly stringent because of uncertainty in the data calculations to develop the numeric criterion. This is inconsistent with Federal guidance on *de minimis* thresholds which requires that the significance of a new or increased discharge depends on the effect of the new or increased discharge on ambient water quality, not on the confidence a State has in the criteria derivation process. The criterion is only relevant in setting the absolute maximum allowable amount of pollutant that can be tolerated without negatively affecting the designated use of the water body.

Recommended changes to Indiana's draft rules:

For the high quality waters (HQP) that are not OSRWs or ONRWs, Indiana should delete 327 IAC 2-1.3-4 (b)(1)((A)(i)(BB) and (CC) and apply the same 10% de minimis exemption referenced at 327 IAC 2-1.3-4(b)(1)((A)(i)(AA) to all new or increased discharges.

3. Indiana's proposed cumulative cap on de minimis lowering of water quality of 25% of the unused assimilative capacity is too high. - 327 IAC 2-1.3-4(b)(1)(A)(i)(DD)

Indiana's draft rules include a proposed cumulative cap on the de minimis lowering of water quality of 25% of the unused loading capacity. IDEM based the 25% cap on the threshold used under the Clean Air Act to identify Maximum Allowable Increases. Federal courts reviewing previous EPA approvals of State antidegradation provisions have found that de minimis provisions are only acceptable where both the individual actions are insignificant (i.e., *de minimis*) and the cumulative impacts of all the individual insignificant actions on a water body, taken together, are also insignificant. *Kentucky Waterways Alliance, et al. v. EPA, et al.*, 540 F.3d 466 (6th Cir. 2008). In EPA's opinion, loss of up to a quarter of the remaining assimilative capacity of a surface water without antidegradation review is not insignificant.

Recommended changes to Indiana's draft rules:

For the HQW that are not OSRW or ONRW, Indiana should limit both individual and cumulative insignificant lowering of water quality to no more than 10% of the baseline assimilative capacity.

4. Indiana's rules exempt certain actions that impact water quality from parts of the antidegradation requirement to demonstrate that a new or increased discharge is necessary to accommodate important social and economic development - 327 IAC 2-1.3-4(b)(3)(B), (E) & (F) & 327 IAC 2-1.3-4(b)(4)

The Federal regulations allow new or increased discharges to lower water quality in high quality waters only after the lowering of water quality is demonstrated to be necessary to accommodate important social and economic development in the area in which the waters are located. Indiana's draft rules contain exemptions from the demonstration requirements for a number of types of activities that may impact water quality. While the "exemption demonstration" in Indiana's rules might address the Federal requirement that any lowering of water quality be technologically necessary (no less degrading alternatives are available), it does not address the social and economic benefits component. To the extent that Indiana is finding, by rule, that the exempted actions are always socially and economically beneficial, Indiana must provide some factual information in the record supporting that assertion. Without such data and analysis in the record, the demonstration is incomplete and therefore inconsistent with the Federal regulations.

Also, 327 IAC 2-1.3-4(b)(3)(B) and 327 IAC 2-1.3-4(b)(4)(A) contemplate offsetting new or increased discharges with other actions within the same 10 digit HUC. Offsetting provisions may be an acceptable basis for determining that antidegradation review is not triggered if it is

clear that the offset results in no change in water quality at the point where the new or increased discharge will occur. It is not clear that the spatial relationship between such actions will be such as to ensure that this requirement will be met in all circumstances that would qualify for this exemption.

Recommended changes to Indiana's rules:

IDEM should either delete the exemption provisions identified above and address these activities through the antidegradation review process on a case-by-case basis, or provide the data and analysis necessary to satisfy the antidegradation demonstration requirement for all the activities that might fall under one of these exemptions.

II. ELEMENTS OF INDIAN'S PROPOSED RULES THAT REQUIRE ADDITIONAL SUPPORT TO DEMONSTRATE HOW THEY ARE CONSTENT WITH THE APPLICABLE FEDERAL REQUIREMENTS

1. Page 36 at 327 IAC 2-1.3-6(b)(13) proposes an analysis of pollution prevention to mitigate degradation.

This section of the proposed rules outlines fifteen components to include within an antidegradation demonstration application. The pollution prevention analysis is #13.

Recommended changes to Indiana's rules:

EPA suggests moving the pollution prevention analysis near the beginning of the antidegradation demonstration. EPA's Supplementary Information Document for Great Lakes basin regulations at 40 CFR 132 recommends a hierarchy of operations, or sequential analysis, focusing first on whether a significant lowering of water quality could be reduced or prevented through the application of prudent and feasible pollution prevention alternatives.

2. Definition for Endangered and Threatened Species

With regards to the definition of threatened and endangered species in the rule, we recommend that the scope of the definition be expanded to better encompass the level of protection called for under the Endangered Species Act (ESA), specifically with regard to the protection of critical habitat. In accordance with the ESA, actions must not "result in the destruction or adverse modification of designated critical habitat".

Recommended changes to Indiana's rules:

The definition of threatened and endangered species could be modified as follows:

"Threatened or endangered species" means the following:

- (A) Species and designated critical habitat listed under Section 4 of the ESA*.
- (B) Species listed as state threatened or endangered by the Indiana department of natural resources under IC 14-22-34.
- (C) Species designated as state threatened or endangered species in the January 22, 1997, database for endangered, threatened, rare, and special concern species maintained by the Indiana natural heritage data center, division of nature preserves, department of natural resources**."

Alternatively, the rule could be revised to refer specifically to threatened and endangered species and any designated critical habitat as information that must be provided by applicants and considered by the director. In this case, EPA recommends that the provision at 327 IAC 2-1.3-7 (c)(3) also be revised to say: " The action would jeopardize state listed endangered or federally listed threatened and endangered species or result in the destruction or adverse modification of designated critical habitat."

3. ESA Footnotes:

With regards to the footnotes to the definition of threatened and endangered species, we suggest that IDEM consider a way to update the state database of species such that new versions of the database, if available, would be used for the purposes of completing accurate and thorough assessments of the potential effects of antidegradation applications on listed species.

4. Additional Definitions:

The draft rules lack definitions for the following terms and are integral to understanding how the rules work:

- Definition of "application"
- Best Available Demonstrated Control Technology (BADCT)
- Definition of "Recommencing Discharge"
- Absence of a definition for "New Discharger"

5. 327 IAC 2-1.3-1(c) Antidegradation Review of Activities Covered by General Permits..

The wording of this provision is unclear. 327 IAC 2-1.3-1(c)(1) states:

"The department shall complete an antidegradation review of the rules of the board that authorize the NPDES permit."

The rule is unclear regarding the board rules to which the antidegradation review shall be applied. The term rules in paragraph (1) implies that it is intended to apply to 327 IAC 15, Rule 1 General Provisions and Rule 2 Basic NPDES General Permit Rule Requirements, Rule 3 NOI Letter Requirements, Rule 4 Standard Conditions for NPDES General Permit Rules rather than a specific permit by rule (e.g. Rule 5. Storm Water Run-Off Associated with Construction Activity). Paragraph (1) should be revised to ensure that an antidegradation review is conducted on each general permit issued by the state.

In addition, paragraph (3) states:

"After an antidegradation review of a rule is conducted, activities covered by an NPDES general permit authorized by that rule are not required to undergo an antidegradation review."

It is not clear how a permanent blanket exemption from antidegradation review is either appropriate or consistent with the Federal antidegradation and permitting requirements. Since treatment and pollution control technologies change over time, regular reconsider the antidegradation review of general permits is warranted with each renewal of the general permit.

Recommended changes to Indiana's rules:

The general permit provisions identified above should be revised to clarify that an antidegradation review is required of each general permit as it is issued and reissued.

